61-58.14
Initial Distribution System Evaluations

Regulation History as Published in State Register			
Date	Document Number	Volume	Issue
October 27, 2006	3070	30	10
April 25, 2008	3200	32	4

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A. Applicability.

This part R.61-58.14 applies to community water systems that use a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light. This part also applies to non-transient non-community water systems that serve at least 10,000 people and use a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

B. General Requirements.

(1) The requirements of this part R.61-58.14 constitute national primary drinking water regulations. The regulations in this part establish monitoring and other requirements for identifying compliance monitoring locations specified in R.61-58.15 for determining compliance with maximum contaminant levels for total trihalomethanes (TTHM) and haloacetic acids (five)(HAA5). Public water systems must use an Initial Distribution System Evaluation (IDSE) to determine locations with representative high TTHM and HAA5 concentrations throughout their distribution system. IDSEs are used in conjunction with, but separate from, R.61-58.13 compliance monitoring, to identify and select R.61-58.15 compliance monitoring locations.

(2) Schedule – Systems subject to this part must comply with the requirements of this part on the following schedule:

(a) For systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve 100,000 people or greater:

(i) The standard monitoring plan or system specific study or 40/30 certification must be submitted to the Department by October 1, 2006.

(ii) The standard monitoring or system specific study must be completed by September 30, 2008.

(iii) The IDSE report must be submitted to the Department by January 1, 2009.

(iv) If, within 12 months after the date identified in paragraph 2(a)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date identified in paragraph (2)(a)(ii) of this section.

(v) If, within 3 months after the date identified in R.61-58.14.(2)(a)(iii), the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(b) For systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve between 50,000 and 99,999 people:

(i) The standard monitoring plan or system specific study or a 40/30 certification must be submitted to the Department by April 1, 2007.

(ii) The standard monitoring or system specific study must be completed by March 31, 2009.

(iii) The IDSE report must be submitted to the Department by July 1, 2009.

(iv) If, within 12 months after the date identified in paragraph 2(b)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date identified in paragraph (2)(b)(ii) of this section.

(v) If, within 3 months after the date identified in R.61-58.14.B(2)(b)(iii), the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(c) For systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve between 10,000 and 49,999 people:

(i) The standard monitoring plan or system specific study or 40/30 certification must be submitted to the Department by October 1, 2007.

(ii) The standard monitoring or system specific study must be completed by September 30, 2009.

(iii) The IDSE report must be submitted to the Department by January 1, 2010.

(iv) If, within 12 months after the date identified in paragraph 2(c)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date identified in paragraph (2)(c)(ii) of this section.

(v) If, within 9 months after the date identified in R.61-58.14.B(2)(c)(iii), the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(d) For systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve less than 10,000 people:

(i) The standard monitoring plan or system specific study or 40/30 certification must be submitted to the Department by April 1, 2008 or a very small system waiver must be granted by the Department by April 1, 2008.

(ii) The standard monitoring or system specific study must be completed by March 31, 2010.

(iii) The IDSE report must be submitted to the Department by July 1, 2010.

(iv) If, within 12 months after the date identified in paragraph 2(d)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the

submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date identified in paragraph (2)(d)(ii) of this section.

(v) If, within 3 months after the date identified in R.61-58.14.B(2)(d)(iii), the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(e) For systems that are part of a combined distribution system

(i) The standard monitoring plan or system specific study or 40/30 certification must be submitted to the Department at the same time as the system in the combined distribution system with the earliest compliance date.

(ii) The standard monitoring or system specific study must be completed at the same time as the system in the combined distribution system with the earliest compliance date.

(iii) The IDSE report must be submitted to the Department at the same time as the system in the combined distribution system with the earliest compliance date.

(iv) If, within 12 months after the date which is determined by the criteria specified in paragraph 2(e)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date which is determined by the criteria specified in paragraph (2)(e)(ii) of this section.

(v) If, within 3 months after the date identified in R.61-58.14.B(2)(e)(iii), the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(3) For the purpose of the schedule in this section, the Department may determine that the combined distribution system does not include certain consecutive systems based on factors such as receiving water from a wholesale system only on an emergency basis or receiving only a small percentage and small volume of water from a wholesale system. The Department may also determine that the combined distribution system does not include certain wholesale systems based on factors such as delivering water to a consecutive system only on an emergency basis or delivering only a small percentage and small volume of water to a consecutive system.

(4) Systems must conduct standard monitoring that meets the requirements in R.61-58.14.C, or a system specific study that meets the requirements in R.61-58.14.D, or certify to the Department that the system meets 40/30 certification criteria under R.61-58.14.E, or qualify for a very small system waiver under R.61-58.14.F.

(a) Systems must have taken the full complement of TTHM and HAA5 compliance samples required under R.61-58.13 during the period specified in R.61-58.14.E(1) to meet the 40/30 certification criteria in

R.61-58.14.E. The system must have taken TTHM and HAA5 samples under R.61-58.13 to be eligible for the very small system waiver in R.61-58.14.F.

(b) Systems that have not taken the required samples must conduct standard monitoring that meets the requirements in R.61-58.14.C, or a system specific study that meets the requirements in R.61-58.14.D.

(5) All analyses used to determine compliance with the requirements in R.61-58.14 must be conducted using only the analytical methods specified in 40 CFR 141.131 (1-04-06 edition), or otherwise approved by EPA for monitoring under 40 CFR 141 subpart U (1-04-06 edition).

(6) IDSE results will not be used for the purpose of determining compliance with MCLs in R.61-58.5.P.

C. Standard Monitoring.

(1) Standard Monitoring Plan.

For systems that choose to conduct standard monitoring, the standard monitoring plan must comply with paragraphs (1)(a) through (1)(d) of this section. The standard monitoring plan must be prepared and submitted to the Department according to the schedule in section B of this part.

(a) The standard monitoring plan must include a schematic of the system's distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating locations and dates of all projected standard monitoring, and all projected R.61-58.13 compliance monitoring.

(b) The standard monitoring plan must include justification of standard monitoring location selection and a summary of data relied upon to justify standard monitoring location selection.

(c) The standard monitoring plan must specify the population served and system type (subpart H or ground water).

(d) The system must retain a complete copy of the standard monitoring plan submitted under this section C, including any Department modification of the standard monitoring plan, for as long as the system is required to retain the IDSE report under R.61-58.14.C(3)(d).

(2) Standard Monitoring.

(a) Systems conducting standard monitoring must monitor as indicated in this paragraph (2)(a). Systems must collect dual sample sets at each monitoring location. One sample in the dual sample set must be analyzed for TTHM. The other sample in the dual sample set must be analyzed for HAA5. Systems must collect one monitoring period during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature. Systems must review available compliance, study, or operational data to determine the peak historical month for TTHM or HAA5 levels or warmest water temperature.

(i) Consecutive systems receiving water from a Subpart H source and serving less than 500 people must collect two (2) dual sample sets taken during the peak historical month for TTHM or HAA5 levels or the during the month of warmest water temperature at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

(B) One (1) dual sample set at a high TTHM location.

(ii) Non-consecutive systems utilizing a Subpart H source and serving less than 500 people must collect two (2) dual sample sets taken during the peak historical month for TTHM or HAA5 levels or the during the month of warmest water temperature at the following locations:

(A) One (1) dual sample set at a high TTHM location.

(B) One (1) dual sample set at a high HAA5 location.

(iii) Consecutive systems receiving water from a Subpart H source and serving between 500 and 3,300 people must collect two (2) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

(B) One (1) dual sample set at a high TTHM location.

(iv) Non-consecutive systems utilizing a Subpart H source and serving between 500 and 3,300 people must collect two (2) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set at a high TTHM location.

(B) One (1) dual sample set at a high HAA5 location.

(v) Consecutive systems receiving water from a Subpart H source or non- consecutive systems utilizing a Subpart H source and serving between 3,301 and 9,999 people must collect four (4) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set at the average residence time.

(B) Two (2) dual sample sets at high TTHM locations.

(C) One (1) dual sample set at a high HAA5 location.

(vi) Consecutive systems receiving water from a Subpart H source or non- consecutive systems utilizing a Subpart H source and serving between 10,000 and 49,999 people must collect eight (8) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

(B) Two (2) dual sample sets at average residence time.

(C) Three (3) dual sample sets at high TTHM locations.

(D) Two (2) dual sample sets at high HAA5 locations.

(vii) Consecutive systems receiving water from a Subpart H source or non- consecutive systems utilizing a Subpart H source and serving between 50,000 and 249,999 people must collect sixteen (16) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

(A) Three (3) dual sample sets near entry points to the distribution system.

(B) Four (4) dual sample sets at average residence time.

(C) Five (5) dual sample sets at high TTHM locations.

(D) Four (4) dual sample sets at high HAA5 locations.

(viii) Consecutive systems receiving water from a Subpart H source or non- consecutive systems utilizing a Subpart H source and serving between 250,000 and 999,999 people must collect twenty-four (24) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

(A) Four (4) dual sample sets near entry points to the distribution system.

(B) Six (6) dual sample sets at average residence time.

(C) Eight (8) dual sample sets at high TTHM locations.

(D) Six (6) dual sample sets at high HAA5 locations.

(ix) Consecutive systems receiving water from a Subpart H source or non- consecutive systems utilizing a Subpart H source and serving between 1,000,000 and 4,999,999 people must collect thirty-two (32) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

(A) Six (6) dual sample sets near entry points to the distribution system.

(B) Eight (8) dual sample sets at average residence time.

(C) Ten (10) dual sample sets at high TTHM locations.

(D) Eight (8) dual sample sets at high HAA5 locations.

(x) Consecutive systems receiving water from a Subpart H source or non- consecutive systems utilizing a Subpart H source and serving 5,000,000 or more people must collect forty (40) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

(A) Eight (8) dual sample sets near entry points to the distribution system.

(B) Ten (10) dual sample sets at average residence time.

(C) Twelve (12) dual sample sets at high TTHM locations.

(D) Ten (10) dual sample sets at high HAA5 locations.

(xi) Consecutive systems receiving water from a ground water source and serving less than 500 people must collect two (2) dual sample sets taken during the peak historical month for TTHM or HAA5 levels or the during the month of warmest water temperature at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

(B) One (1) dual sample set at a high TTHM location.

(xii) Non-consecutive systems utilizing a ground water source and serving less than 500 people must collect two (2) dual sample sets taken during the peak historical month for TTHM or HAA5 levels or the during the month of warmest water temperature at the following locations:

(A) One (1) dual sample set at a high TTHM location.

(B) One (1) dual sample set at a high HAA5 location.

(xiii) Consecutive systems receiving water from a ground water source or non- consecutive systems utilizing a ground water source and serving between 500 and 9,999 people must collect two (2) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set at a high TTHM location.

(B) One (1) dual sample set at a high HAA5 location.

(xiv) Consecutive systems receiving water from a ground water source or non- consecutive systems utilizing a ground water source and serving between 10,000 and 99,999 people must collect six (6) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

(B) One (1) dual sample set at average residence time.

(C) Two (2) dual sample sets at high TTHM locations.

(D) Two (2) dual sample sets at high HAA5 locations.

(xv) Consecutive systems receiving water from a ground water source or non- consecutive systems utilizing a ground water source and serving between 100,000 and 499,999 people must collect eight (8) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

(B) One (1) dual sample set at average residence time.

(C) Three (3) dual sample sets at high TTHM locations.

(D) Three (3) dual sample sets at high HAA5 locations.

(xvi) Consecutive systems receiving water from a ground water source or non- consecutive systems utilizing a ground water source and serving 500,000 or more people must collect twelve (12) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) Two (2) dual sample sets near entry points to the distribution system.

(B) Two (2) dual sample sets at average residence time.

(C) Four (4) dual sample sets at high TTHM locations.

(D) Four (4) dual sample sets at high HAA5 locations.

(b) Samples must be taken at locations other than the existing monitoring locations utilized for compliance with R.61-58.13. Monitoring locations must be distributed throughout the distribution system.

(c) If the number of entry points to the distribution system is fewer than the specified number of entry point monitoring locations, excess entry point samples must be replaced equally at high TTHM and HAA5 locations. If there is an odd extra location number, the system must take a sample at a high TTHM location. If the number of entry points to the distribution system is more than the specified number of entry point monitoring locations, the system must take samples at entry points to the distribution system having the highest annual water flows.

(d) Monitoring under this section C may not be reduced.

(3) IDSE Report

The IDSE report must include the elements required in paragraphs (3)(a) through (3)(d) of this section C. The system must submit their IDSE report to the Department according to the schedule in R61-58.14.B(2).

(a) The IDSE report must include all TTHM and HAA5 analytical results from R.61-58.13 compliance monitoring and all standard monitoring conducted during the period of the IDSE as individual analytical results and LRAAs presented in a tabular or spreadsheet format acceptable to the Department. If changed from the standard monitoring plan submitted under paragraph (1) of this section C, the report must also include a schematic of the distribution system, the population served, and system type (subpart H or ground water).

(b) The IDSE report must include an explanation of any deviations from the approved standard monitoring plan.

(c) The IDSE report must recommend and justify compliance monitoring locations for compliance with R.61-58.15 and timing based on the protocol in R.61-58.14.G.

(d) Systems must retain a complete copy of the IDSE report submitted under this section for 10 years after the date that the report is submitted. If the Department modifies the monitoring requirements for compliance with R.51-58.15 that is recommended in the IDSE report or if the Department approves alternative monitoring locations, systems must keep a copy of the Department's notification on file for 10 years after the date of the Department's notification. Systems must make the IDSE report and any Department notification available for review by the Department or the public.

D. System Specific Studies.

(1) System Specific Study Plan. For systems that choose to conduct a system specific study, the system specific study plan must be based on either existing monitoring results as required under paragraph (1)(a) of this section or modeling as required under paragraph (1)(b) of this section. The system specific study plan must be prepared and submitted to the Department according to the schedule in section B of this part.

(a) Existing monitoring results. Systems may comply by submitting monitoring results collected before they are required to begin monitoring under section B of this part. The monitoring results and analysis must meet the criteria in paragraphs (1)(a)(i) and (1)(a)(ii) of this section.

(i) Minimum requirements.

(A) TTHM and HAA5 results must be based on samples collected and analyzed in accordance with 40 CFR 141.131 (1-04-06 edition). Samples must be collected no earlier than five years prior to the study plan submission date.

(B) The monitoring locations and frequency must meet the conditions identified in this paragraph (1)(a)(i)(B). Each location must be sampled once during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature for every 12 months of data submitted for that location. Monitoring results must include all R.61-58.13 compliance monitoring results plus additional monitoring results as necessary to meet minimum sample requirements.

System Type	Population size category	Number of monitoring locations	Number of TTHM samples	Number of HAA5 samples
Subpart H	Less than 500	3	3	3
Subpart H	500 – 3,300	3	9	9
Subpart H	3,301 – 9,999	6	36	36
Subpart H	10,000 – 49,999	12	72	72
Subpart H	50,000 – 249,999	24	144	144
Subpart H	250,000 – 999,999	36	216	216
Subpart H	1,000,000 – 4,999,999	48	288	288
Subpart H	5,000,000 or greater	60	360	360
Ground Water	Less than 500	3	3	3
Ground Water	500 – 9,999	3	9	9
Ground Water	10,000 – 99,999	12	48	48
Ground Water	100,000 – 499,999	18	72	72
Ground Water	500,000 or greater	24	96	96

(ii) Reporting monitoring results. The information in this paragraph (1)(a)(ii) must be reported.

(A) Systems must report previously collected monitoring results and certify that the reported monitoring results include all compliance and non-compliance results generated during the time period beginning with the first reported result and ending with the most recent results of samples taken for compliance with R.61-58.13.

(B) Systems must certify that the samples were representative of the entire distribution system and that treatment, and distribution system have not changed significantly since the samples were collected.

(C) The system specific study monitoring plan must include a schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating the locations and dates of all completed or planned system specific study monitoring.

(D) The system specific study plan must specify the population served and system type (subpart H or ground water).

(E) The system must retain a complete copy of the specific study plan submitted under this paragraph (1)(a), including any EPA or Department modification of the system specific study plan, for as long as they are required to retain the IDSE report under paragraph 2(g) of this section.

(F) If previously collected data that fully meet the number of samples required under paragraph (1)(a)(i)(B) of this section is submitted by the system and the Department rejects some of the data, the system must either conduct additional monitoring to replace rejected data on a schedule the Department approves or conduct standard monitoring under section R.61-58.14.C.

(b) Modeling. Systems may comply through analysis of an extended period simulation hydraulic model. The extended period simulation hydraulic model and analysis must meet the criteria in this paragraph (1)(b).

(i) Minimum requirements.

(A) The model must simulate 24-hour variation in demand and show a consistently repeating 24-hour pattern of residence time.

(B) The model must represent the criteria listed in paragraphs (1)(b)(i)(B)(1) through (1)(b)(i)(B)(9) of this section.

(1) 75% of pipe volume;

(2) 50% of pipe length;

(3) All pressure zones;

(4) All 12-inch diameter and larger pipes;

(5) All 8-inch and larger pipes that connect pressure zones, influence zones from different sources, storage facilities, major demand areas, pumps, and control valves, or are known or expected to be significant conveyors of water;

(6) All 6-inch and larger pipes that connect remote areas of a distribution system to the main portion of the system;

(7) All storage facilities with standard operations represented in the model;

(8) All active pump stations with controls represented in the model; and

(9) All active control valves.

(C) The model must be calibrated, or have calibration plans, for the current configuration of the distribution system during the period of high TTHM formation potential. All storage facilities must be evaluated as part of the calibration process. All required calibration must be completed no later than 12 months after plan submission.

(ii) Reporting modeling. The system specific study plan must include the information in this paragraph (1)(b)(ii).

(A) Tabular or spreadsheet data demonstrating that the model meets requirements in paragraph (1)(b)(i)(B) of this section.

(B) A description of all calibration activities undertaken, and if calibration is complete, a graph of predicted tank levels versus measured tank levels for the storage facility with the highest residence time

in each pressure zone, and a time series graph of the residence time at the longest residence time storage facility in the distribution system showing the predictions for the entire simulation period (i.e., from time zero until the time it takes to for the model to reach a consistently repeating pattern of residence time).

(C) Model output showing preliminary 24-hour average residence time predictions throughout the distribution system.

(D) Timing and number of samples representative of the distribution system planned for at least one monitoring period of TTHM and HAA5 dual sample monitoring at a number of locations no less than would be required for the system under standard monitoring in section R.61-58.14.C during the historical month of high TTHM. These samples must be taken at locations other than existing R.61-58.13 compliance monitoring locations.

(E) Description of how all requirements will be completed no later than 12 months after the system submits their system specific study plan.

(F) Schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating the locations and dates of all completed system specific study monitoring (if calibration is complete) and all R.61-58.13 compliance monitoring.

(G) Population served and system type (subpart H or ground water).

(H) Systems must retain a complete copy of their system specific study plan submitted under this paragraph (1)(b), including any EPA or Department modification of their system specific study plan, for as long as they are required to retain their IDSE report under paragraph (2)(g) of this section.

(iii) Systems that submit a model that does not fully meet the requirements under paragraph (1)(b) of this section, must correct the deficiencies and respond to EPA's or the Department's inquiries concerning the model. If the system fails to correct deficiencies or respond to inquiries to the Department's satisfaction, the system must conduct standard monitoring under R.61-58.14.C

(2) IDSE report.

The IDSE report must include the elements required in paragraphs (2)(a) through (2)(f) of this section. Systems must submit their IDSE report according to the schedule in R.61-58.14.B(2).

(a) The IDSE report must include all TTHM and HAA5 analytical results from R.61-58.13 compliance monitoring and all system specific study monitoring conducted during the period of the system specific study presented in a tabular or spreadsheet format acceptable to the Department. If changed from the system specific study plan submitted under paragraph (1) of this section, the IDSE report must also include a schematic of the distribution system, the population served, and system type (subpart H or ground water).

(b) If the system used the modeling provision under paragraph (1)(b) of this section, they must include final information for the elements described in paragraph (1)(b)(ii) of this section, and a 24-hour time series graph of residence time for each R.61-58.15 compliance monitoring location selected.

(c) The IDSE report must recommend and justify R.61-58.15 compliance monitoring locations and timing based on the protocol in R.61-58.14.G

(d) The IDSE report must include an explanation of any deviations from the system's approved system specific study plan.

(e) The IDSE report must include the basis (analytical and modeling results) and justification used to select the recommended R.61-58.15 monitoring locations.

(f) Systems may submit their IDSE report in lieu of a system specific study plan on the schedule identified in R.61-58.14.B(2) for submission of the system specific study plan if the system believes that it has the necessary information by the time that the system specific study plan is due. If the system elects this approach, their IDSE report must also include all information required under paragraph (1) of this section.

(g) Systems must retain a complete copy of the IDSE report submitted under this section for 10 years after the date that the IDSE report is submitted. If the Department modifies the monitoring requirements for compliance with R.51-58.15 that are recommended in the IDSE report or if the Department approves alternative monitoring locations, water systems must keep a copy of the Department's notification on file for 10 years after the date of the Department's notification. Systems must make the IDSE report and any Department notification available for review by the Department or the public.

E. 40/30 Certification.

(1) Eligibility

Systems are eligible for 40/30 certification if they had no TTHM or HAA5 monitoring violations under R.61-58.13 and no individual sample exceeded 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 during an eight consecutive calendar quarter period beginning no earlier than the date specified in this paragraph (1).

(a) If 40/30 certification is due October 1, 2006, then eligibility for 40/30 certification is based on eight consecutive calendar quarters of results of monitoring for compliance with R.61-58.13 beginning no earlier than January 2004.

(b) If 40/30 certification is due April 1, 2007, then eligibility for 40/30 certification is based on eight consecutive calendar quarters of results of monitoring for compliance with R.61-58.13 beginning no earlier than January 2004.

(c) If 40/30 certification is due October 1, 2007, then eligibility for 40/30 certification is based on eight consecutive calendar quarters of results of monitoring for compliance with R.61-58.13 beginning no earlier than January 2005.

(d) If 40/30 certification is due April 1, 2008, then eligibility for 40/30 certification is based on eight consecutive calendar quarters of results of monitoring for compliance with R.61-58.13 beginning no earlier than January 2005.

(e) If a system is on reduced monitoring under R.61-58.13 and was not required to monitor during the specified monitoring period, eligibility is based on compliance samples taken during the 12 months preceding the specified period.

(2) 40/30 Certification

(a) Systems applying for 40/30 certification must certify to the Department that every individual compliance sample taken under R.61-58.13 during the periods specified in paragraph (1) of this section

were less than or equal to 0.040 mg/L for TTHM and less than or equal to 0.030 mg/L for HAA5, and that no TTHM or HAA5 monitoring violations were incurred during the period specified in paragraph (1) of this section.

(b) The Department may require that systems applying for 40/30 certification submit compliance monitoring results, distribution system schematics, and/or recommended R.61-58.15 compliance monitoring locations in addition to their certification. If the system fails to submit the requested information, the Department may require standard monitoring under R.61-58.14.C or a system specific study under R.61-58.14.D

(c) The Department may still require standard monitoring under R.61-58.14.C or a system specific study under R.61-58.14.D even if a system meets the criteria in paragraph (1) of this section.

(d) Systems must retain a complete copy of the 40/30 certification submitted under this section for 10 years after the date that the certification is submitted. Systems must make the certification, all data upon which the certification is based, and any Department notification available for review by the Department or the public.

F. Very Small System Waivers.

(1) If a system serves fewer than 500 people and has taken TTHM and HAA5 samples under R.61-58.13, the system is not required to comply with this part R.61-58.14 unless the Department notifies the system that it must conduct standard monitoring under R.61-58.14.C or a system specific study under R.61-58.14.D.

(2) If a system has not taken TTHM and HAA5 samples under R.61-58.13 or if the Department notifies the system that they must comply with the part R.61-58.14, the system must conduct standard monitoring under R.61-58.14.C or a system specific study under R.61-58.14.D.

G. Stage 2 Disinfection Byproducts Rule Compliance Monitoring Location Recommendations.

(1) The IDSE report must include recommendations and justification for where and during what month(s) TTHM and HAA5 monitoring for compliance with requirements of R.61-58.15 should be conducted. Recommendations must be based on the criteria in paragraphs (2) through (5) of this section.

(2) Systems must select the number of monitoring locations specified in the table in this paragraph (2). These recommended locations will be used as R.61-58.15 (Stage 2 Disinfection Byproducts Requirements) routine compliance monitoring locations, unless the Department requires different or additional locations. Monitoring locations should be distributed throughout the distribution system to the extent possible.

Source Water Type	Population size category	Monitoring frequency	Total monitoring locations per monitoring period	Highest TTHM monitoring locations	Highest HAA5 monitoring locations	Existing R.61-58.13 compliance monitoring locations
Subpart H	Less than 500	per year	2	1	1	-
Subpart H	500 – 3,300	per quarter	2	1	1	-
Subpart H	3,301 – 9,999	per quarter	2	1	1	-
Subpart H	10,000 – 49,999	per quarter	4	2	1	1

Source Water Type	Population size category	Monitoring frequency	Total monitoring locations per monitoring period	Highest TTHM monitoring locations	Highest HAA5 monitoring locations	Existing R.61-58.13 compliance monitoring locations
Subpart H	50,000 – 249,999	per quarter	8	3	3	2
Subpart H	250,000 – 999,999	per quarter	12	5	4	3
Subpart H	1,000,000 – 4,999,999	per quarter	16	6	6	4
Subpart H	5,000,000 or greater	per quarter	20	8	7	5
Ground Water	Less than 500	per year	2	1	1	-
Ground Water	500 – 9,999	per year	2	1	1	-
Ground Water	10,000 – 99,999	per quarter	4	2	1	1
Ground Water	100,000 – 499,999	per quarter	6	3	2	1
Ground Water	500,000 or greater	per quarter	8	3	3	2

(a) All systems must monitor during the month of highest disinfection byproduct (DBP) concentrations.

(b) Systems on quarterly monitoring must take dual sample sets every 90 days at each monitoring location, except for subpart H systems serving 500- 3,300. Systems on annual monitoring and subpart H systems serving 500-3,300 are required to take individual TTHM and HAA5 samples (instead of a dual sample set) at the locations with the highest TTHM and HAA5 concentrations, respectively. Only one location with a dual sample set per monitoring period is needed if highest TTHM and HAA5 concentrations occur at the same location, and month, if monitored annually.

(3) Systems must recommend R.61-58.15 compliance monitoring locations based on standard monitoring results, system specific study results, and R.61-58.13 compliance monitoring results. Systems must follow the protocol in paragraphs (3)(a) through (3)(h) of this section. If required to monitor at more than eight locations, a system must repeat the protocol as necessary. If a system does not have existing R.61-58.13 compliance monitoring results or if they do not have enough existing R.61-58.13 compliance monitoring results, they must repeat the protocol, skipping the provisions of paragraphs (3)(c) and (3)(g) of this section as necessary, until the required total number of monitoring locations have been identified.

(a) Location with the highest TTHM LRAA not previously selected as an R.61-58.15 monitoring location.

(b) Location with the highest HAA5 LRAA not previously selected as an R.61-58.15 monitoring location.

(c) Existing R.61-58.13 average residence time compliance monitoring location (maximum residence time compliance monitoring location for ground water systems) with the highest HAA5 LRAA not previously selected as an R.61-58.15 monitoring location.

(d) Location with the highest TTHM LRAA not previously selected as an R.61-58.15 monitoring location.

(e) Location with the highest TTHM LRAA not previously selected as an R.61-58.15 monitoring location.

(f) Location with the highest HAA5 LRAA not previously selected as an R.61-58.15 monitoring location.

(g) Existing R.61-58.13 average residence time compliance monitoring location (maximum residence time compliance monitoring location for ground water systems) with the highest TTHM LRAA not previously selected as a R.61-58.15 monitoring location.

(h) Location with the highest HAA5 LRAA not previously selected as an R.61-58.15 monitoring location.

(4) A system may recommend locations other than those specified in paragraph (3) of this section if they include a rationale for selecting other locations. If the Department approves the alternate locations, the system must monitor at these locations to determine compliance under R.61-58.15.

(5) The recommended schedule must include R.61-58.15 monitoring during the peak historical month for TTHM and HAA5 concentration, unless the Department approves another month. Once the peak historical month has been identified, and if the system is required to conduct routine monitoring at least quarterly, the system must schedule R.61-58.15 compliance monitoring at a regular frequency of every 90 days or fewer.